SCIENTIFIC NOTE

Two Records of Intestinal Myiasis Caused by *Ornidia obesa* and *Hermetia illucens* in Hawaii

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Abstract. Intestinal myiasis caused by *Ornidia obesa* and *Hermetia illucens* is not common, especially for *O. obesa*. This is the first report of of intestinal myiasis caused by these two species in Hawaii.

Key words: Intestinal myiasis, *Ornidia obesa*, *Hermetia illucens*, Hawaii

In April 2008 a female schoolteacher, aged 42, in Hilo (Hawaii island), found some insect larvae in her stool. She was experiencing abdominal cramps and became concerned about what was occurring within her gastrointestinal system. The subject submitted the live maggots collected from the stool to a University of Hawaii at Hilo nurse. I received one larva from the Medical Microbiology Branch, Department of Health, where the nurse sent her samples. The specimen, light brown, 18 mm long, and 5 mm wide, was identified as *Ornidia obesa*, a species of flower fly (Diptera: Syrphidae).

In July 2009, I received one larva from the same branch for identification. The larva was collected from the stool of a man, aged 43, from Guam. The specimen, reddish-brown, 24 mm long, and 6 mm wide, was identified as *Hermetia illucens*, a black soldier fly (Diptera: Stratiomyidae).

Both *O. obesa* and *H. illucens* occur in Hawaii (Nishida 2002), and their immature stages can be found in decomposing plant and animal materials. Hawaii State Department of Health, Vector Control personnel has collected the larvae of *O. obesa* from chicken and cattle manure and the larvae

of H. illucens from chicken manure.

Intestinal myiasis caused by *O. obesa* and *H. illucens* is not common, especially for *O. obesa*. There was not any report of myiasis attributable to *O. obesa* until 2008, when the first case of myiasis by *O. obesa* in humans was reported from Brazil (Monteiro et al. 2008). For *H. illucens*, only a few human cases have been documented (James 1947).

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